

CLAIMS

1. Method to calibrate and/or regulate a mixing valve, in particular in a cooling circuit of an internal combustion engine, with which a volume flow can be separated into two partial flows as a function of controlled quantity, whereby the separating ratio of the mixing valve or the mixing ratio is determined by comparing a target quantity with an actual measured quantity, characterized in that a correction value that is computed during operation is taken into consideration in calculating the separating ratio or mixing ratio (MR).
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2. Method according to Claim 1, characterized in that a real mixing ratio (MR_{real}) is computed to calculate the correction value and is compared with the prescribed mixing ratio (MR_{target}).
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3. Method according to Claim 1 or 2, characterized in that the correction value is formed from an output quantity of a superimposed control unit (34).
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4. Method according to Claim 3, characterized in that the superimposed control unit (34) is an integral control unit.
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5. Method according to one of Claims 1 through 4, characterized in that additional characteristic quantities, particularly a volume flow through the mixing valve (12), an outside temperature and/or an air flow rate through a heat exchanger (16), are taken into consideration in forming the correction value.
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6. Method according to one of Claims 1 through 5, characterized in that a plurality of correction values is stored in a correction characteristic curve.
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7. Method according to one of Claims 1 through 6, characterized in that the correction values or the correction characteristic curves are stored in a characteristic diagram.

8. Method according to one of the preceding claims, characterized in that the mixing valve (12) is permanently calibrated by means of taking the correction values into consideration.
- 5 9. Regulating device to regulate and/or calibrate a mixing valve, in particular in a cooling circuit of an internal combustion engine, with which a volume flow can be separated into two partial flows as a function of controlled quantity, whereby the separating ratio of the mixing valve can be determined by comparing a target quantity with an actual measured quantity, characterized in that a correction value that is computed during operation can be taken into consideration in calculating the separating ratio.
- 10 10. Regulating device according to Claim 9, characterized in that the correction value can be derived from a calculation of a real mixing ratio (MR_{real}) and a comparison with the prescribed mixing ratio (MR_{target}).
- 15 11. Regulating device according to Claims 9 or 10, characterized in that the correction value can be derived from an output quantity of a superimposed control unit (34).
- 20 12. Regulating device according to Claim 11, characterized in that the superimposed control unit (34) is an integral control unit.
- 25 13. Regulating device according to one of Claims 9 through 12, characterized in that the correction value is formed from additional characteristic quantities, particularly a volume flow through the mixing valve (12), an outside temperature and/or an air flow rate through a heat exchanger (16).
- 30 14. Regulating device according to one of Claims 9 through 13, characterized in that a plurality of correction values are stored in a correction characteristic curve.

15. Regulating device according to one of Claims 9 through 14, characterized in that a plurality of correction values or a plurality of correction characteristic curves are stored in a characteristic diagram.
- 5 16. Regulating device according to one of Claims 9 through 15, characterized in that the mixing valve (12) can be permanently calibrated by means of taking the correction values into consideration.